

**CLAIMS:**

1. (Previously presented) A method of promoting neurogenesis comprising the steps of:

administering a therapeutic amount of a phosphodiesterase type 5 inhibitor compound to an ischemic patient in need of neurogenesis promotion;  
promoting neurogenesis; and  
identifying increased numbers of new neurons.

2. (Currently amended) The method according to claim 1, further including administering cellular therapy of mesenchymal stem cells to the patient.

3 - 7. (Canceled)

8. (Previously presented) A method of augmenting the production of neurons by administering an effective amount of a phosphodiesterase type 5 inhibitor to a site in need of augmentation in an ischemic patient, augmenting production of neurons, and identifying increased numbers of new neurons.

9. (Currently amended) The method according to claim 8, further including administering cellular therapy of mesenchymal stem cells to the site.

10. (Previously presented) A method of increasing neurological function by administering an effective amount of a phosphodiesterase type 5 inhibitor to an ischemic patient, increasing neurological function, and identifying increased numbers of new neurons.

11. (Currently amended) The method according to claim 10, further including administering cellular therapy of mesenchymal stem cells to the patient.

12. (Previously presented) A method of increasing cognitive and neurological function by administering an effective amount of a phosphodiesterase type 5 inhibitor compound to an ischemic patient, increasing cognitive and neurological function, and identifying increased numbers of new neurons.

13. (Currently amended) The method according to claim 12, further including administering cellular therapy of mesenchymal stem cells to the patient.

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